



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,616	03/21/2005	Peter Kukla	013344-9059-00	4776

23409            7590            11/13/2007  
MICHAEL BEST & FRIEDRICH LLP  
100 E WISCONSIN AVENUE  
Suite 3300  
MILWAUKEE, WI 53202

EXAMINER
----------

TOYE, TAMIKO S

ART UNIT	PAPER NUMBER
----------	--------------

1797

MAIL DATE	DELIVERY MODE
-----------	---------------

11/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/528,616	KUKLA, PETER
<b>Examiner</b>	<b>Art Unit</b>	
Tamiko Toye	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 March 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 March 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/21/2005</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-10, 12-13 and 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Gonas et al. (US 4,147,522).**

Regarding claim 1 Gonas discloses a gas cleaning device comprising a gas inlet, a gas outlet (Col. 10, Lines 26-30) and a path of fluid communication between the gas inlet and gas outlet (Col. 10, Lines 31-38), a filter in the path of fluid communication and ionizing means, which ionizing means is at least partly within the filter (**Figure 2**).

Regarding claim 2, Gonas discloses the ionizing means, which is partly within and partly outside the filter (**Figure 3**).

Regarding claim 3, Gonas discloses a major part of the ionizing means being within the filter (**Figure 3**).

Regarding claim 4, Gonas discloses an ionizing means that is mounted externally of the filter (**Figure 3**).

Regarding claim 5, Gonas discloses a first end and a second end that is mounted at the first end only (**Figure 3**).

Regarding claim 6, Gonaz discloses a hollow tube into which the ionizing means projects (**Col. 12, Lines 41-59**).

Regarding claim 7, Gonaz discloses an electrode (**Col. 4, Lines 6-13**).

Regarding claim 8, Gonaz discloses an elongate filament (**Col. 4, Lines 9-15 and Col. 4, Lines 37-41**).

Regarding claim 9, Gonaz discloses a filter that comprises a filter opening, the leading edge of which is returned (**Figure 3**).

Regarding claim 10, Gonaz discloses an exit tube at least partly in the filter (**Figure 3**).

Regarding claim 12, Gonaz discloses a first path through the filter and a second path avoiding the filter (**Col. 2, Lines 61-64**).

Regarding claim 13, Gonaz discloses an exit tube at least partly in the filter and having an opening, and in which the second path is through the exit tube opening (**Figure 3**).

Regarding claim 16, Gonaz discloses an electrically conductive layer adjacent a filtration layer (**Col. 2, Lines 67-68 and Col. 3, Lines 1-2**).

Art Unit: 1797

Regarding claim 17, Gonas discloses a conductive layer that is to the interior of the filtration layer (**Col. 2, Lines 67-68 and Col. 3, Lines 1-2**).

Regarding claim 18, Gonas discloses a gas permeable layer (**Col. 4, Lines 37-50**).

Regarding claim 19, Gonas discloses a metallic layer (**Col. 3, Lines 14-18**).

Regarding claim 20, Gonas discloses the conductive layer is connected to a power supply, whereby the conductive layer can be electrically heated (**Col. 6, Lines 67-68 and Col. 7, Lines 1-8**).

Regarding claim 21, Gonas discloses the conductive layer is at least partly coated in a less conductive layer (**Col. 4, Lines 9-15**).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 1797

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gonas et al. (US 4,147,522) in view of Anderson (US 2,275, 001).**

Regarding claim 11, Gonas discloses the limitations in claim 10 but does not disclose an external truncated cone.

Anderson discloses the entrance to the exit tube that comprises an external truncated cone (**Col. 2, Lines 39-44**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a tube with a cone shape because dust particles will not accumulate inside the tube.

**Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonas et al. (US 4, 47,522) in view of Gauck (US 3,696,799).**

Regarding claim 14, Gonas discloses the limitation in claim 13 but does not disclose a return hole that is provided in the exit tube for the first flow path to join the second flow path.

Gauck discloses a return hole that is provided in the exit tube for the first flow path to join the second flow path (**Col. 3, Lines 25-33**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a hole into the tube of the Gonas reference to permit the flow of air into the tube as suggested by Gauck.

Regarding claim 15, Gauck discloses a hole that is small relative to the cross-sectional area of the exit tube (Col. 3, Lines 19-24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a hole into the tube of the Gonaz reference to permit the flow of air into the tube as suggested by Gauck.

**Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hertzberg (US 2002/0004024) in view of Gonaz et al. (US 4,147,522).**

Hertzberg discloses a vehicle comprising a vehicle exhaust with an exhaust gas flow path and a gas cleaning device in the exhaust gas flow path (Paragraph 0020).

Hertzberg does not disclose the gas cleaning device including a gas inlet, a gas outlet and a path of fluid communication between the gas inlet and gas outlet, a filter in the path of fluid communication and ionizing means, which ionizing means is at least partly within the filter.

Gonaz discloses the gas cleaning device including a gas inlet, a gas outlet (Col. 10, Lines 26-30) and a path of fluid communication between the gas inlet and gas outlet (Col. 10, Lines 31-38), a filter in the path of fluid communication and ionizing means, which ionizing means is at least partly within the filter (Figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a gas cleaning device in the Hertzberg reference that separates particulate matter from a gas stream as suggested by Gonaz.

***Claim Objections***

Claim 15 is objected to because of the following informalities: Claim 15 should depend on claim 14. Appropriate correction is required.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko Toye whose telephone number is 571-270-3238. The examiner can normally be reached on 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT

*Walter D. Griffin*  
WALTER D. GRIFFIN  
SUPERVISORY PATENT EXAMINER